

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An oligomerization process comprising contacting a ~~hydrocarbon~~ feedstock which has not been preliminarily desulfurized by hydrogen treatment, comprising sulfur-containing molecules with a hydrotreating catalyst in the absence of hydrogen at a temperature ranging from about 392°F to about 600°F, wherein said ~~hydrocarbon~~ feedstock is selected from the group consisting of C₄ olefin streams, C₅ olefin streams, C₄ and C₅ olefin streams, pygas streams, coker streams, light FCC gasoline, C₇₊ reformate streams, light reformate streams containing benzene and toluene, pulp and paper byproducts, sugars, natural fatty acids and alcohols.

Claim 2 (original): The process according to Claim 1, wherein said process is carried out in the liquid phase.

Claim 3 (previously presented): The process according to Claim 1, wherein said sulfur-containing molecules are oligomerized.

Claim 4 (original): The process according to Claim 2, wherein said hydrotreating catalyst comprises non-acidic supported mixed metal oxides.

Claim 5 (original): The process according to Claim 1, wherein said hydrotreating catalyst is supported on alumina and comprises mixed nickel and molybdenum oxides or mixed cobalt and molybdenum oxides.

Claim 6 (original): The process according to Claim 1, wherein said catalyst is a heterogeneous catalyst selected from the group consisting of supported reduced metals, metal oxides, metal sulfides and combinations thereof.

Claim 7 (original): The process according to Claim 2, wherein said catalyst is a heterogeneous catalyst selected from the group consisting of supported reduced metals, metal oxides, metal sulfides and combinations thereof.

Claim 8 (previously presented): The process according to Claim 2, wherein said process is carried out at a temperature of from about 392°F to about 500°F; a space velocity of from about 0.1 WHSV to about 100 WHSV; and a pressure of from about 50 psig to about 1000 psig.

Claim 9 (previously presented): The process according to Claim 2, wherein said process is carried out at a temperature of from about 392°F to about 450°F; a space velocity of from about 0.1 WHSV to about 100 WHSV; and a pressure of from about 50 psig to about 1000 psig.

Claim 10 (original): The process according to Claim 2, wherein said hydrotreating catalyst is a NiMo/Al₂O₃ catalyst.

Claim 11 (previously presented): The process according to Claim 1 wherein said process is carried out at a temperature of from about 400°F to about 500°F.

Claim 12 (currently amended): The process according to Claim 1 wherein said hydrocarbon feedstock comprises about 1 wt.% of sulfur-containing molecules.

Claim 13 (currently amended): The process according to Claim 1 wherein said hydrocarbon feedstock comprises at least 10 to 100 ppm of sulfur-containing molecules.

Claim 14 (currently amended): The process according to Claim 1 wherein said ~~hydrocarbon~~-feedstock comprises from greater than 50 to 100 ppm of sulfur-containing molecules.

Claim 15 (previously presented): The process according to Claim 1 wherein more than 95% of said sulfur-containing molecules are converted to oligomers.

Claim 16 (currently amended): The process according to Claim 1 wherein said ~~hydrocarbon~~-feedstock comprises 100 ppm sulfur to 10000 ppm of sulfur-containing molecules.

Claim 17 (currently amended): The process according to Claim 1 wherein said ~~hydrocarbon~~-feedstock comprises dienes.

Claim 18 (currently amended): The process according to Claim 1 wherein said ~~hydrocarbon~~-feedstock comprises 20-120 ppm dienes.

Claim 19 (currently amended): The process according to Claim 3, wherein said ~~hydrocarbon~~-feedstock is selected from the group consisting of light FCC gasoline, C₇₊ reformate streams and light reformate streams containing benzene and toluene.

Claim 20 (previously presented): The process according to Claim 1 wherein said ~~hydrocarbon~~-feedstock is light FCC gasoline.